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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948				
			EXAMINER DANIELS, MATTHEW J	
			ART UNIT 1732	PAPER NUMBER

DATE MAILED: 08/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/632,491	Applicant(s) SKIDMORE ET AL.	
	Examiner Matthew J. Daniels	Art Unit 1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-20 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-20 and 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In the reply filed 26 May 2006, Claims 1, 4, 5, 7, 9-20, 23, and 24 were amended. No claims were cancelled and there are no new claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1-5 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Whissell (USPN 4802836) in view of Batlle (USPN 5358214). As to Claim 1, Whissell teaches the well known aspects of making masonry units, comprising:

- a) raising a pallet to a bottom surface of a mold (Figs. 5- 7)
- c) dispensing mix into the mold (Fig. 6)
- d) compressing the mix with a shoe (Figs. 6-7)
- e) responsive to the compressing, forming a masonry unit.

Whissell appears to be silent to:

- b) inserting a filler plug into the side of the mold between a partition plate and a pallet and c) a filler plug effect in the compressed mix whereby a masonry unit having a filler plug effect is provided.

However, Batlle teaches inserting a filler plug into the side of the mold between a partition plate and a pallet (Figs. 1-5) and a filler plug effect in the compressed mix whereby a filler plug effect is provided (Fig. 5 and 2:46-49).

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Batlle into that of Whissell for the following reasons:

- a) Batlle teaches that stripping of the part from a mold causes serious problems since the adherence thereof to the mold itself and to the strips causes stresses to be formed in precastings, causing deterioration thereof, which Batlle's method resolves
- b) Batlle suggests use in precastings, and Whissell's concrete blocks are considered to be precastings.

As to Claim 2, Batlle teaches removing the filler plug (3:40-45). **As to Claim 3**, Whissell strips by lowering the pallet, a step which is conventional and common in the art (Figs. 5-7). **As to Claim 4**, because Batlle's bevel sits on the bottom of the mold, it is obviously a bottom bevel in a compressed mix forming a masonry unit (Fig. 5 and 2:46-49). **As to Claim 5**, Batlle's bevel formed in the compressed mix could fulfill the intended use of being a mortar buffer surface, and therefore fulfills the claim limitation. **As to Claim 23**, Whissell and Batlle appear to be silent to the particular shapes and sizes sought in this dependent claim. However, these limitations appear to be drawn to the particular shape of the article sought and to the shape of the apparatus that makes the desired article. However, it is the Examiner's position that when the process steps are known from the prior art, the limitations relating to *size* or *shape* of the *article* produced or the *apparatus* used to perform the process would not be sufficient to

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patentably distinguish the claimed method. Additionally, Batlle appears to teach the claimed shape (Fig. 5).

3. **Claims 7, 8, and 9-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Whissell (USPN 4802836) in view of Batlle (USPN 5358214), and further in view of LaCroix (USPN 6113379) and Stuckey (USPN 1872522). Whissell and Batlle teach the subject matter of Claim 1 under 35 USC 103(a) above. **As to Claim 7**, Whissell and Batlle teach the bevel between the front surface and bottom surface (See Batlle's figures), but appear to be silent to the side gussets, and therefore to the forming of an angle of inclination between a front surface, and the top and sides. However, LaCroix teaches that such side gussets are known as a desired article shape (Fig. 7, for instance), and Stuckey teaches a "shoe" having an angular surface which would create a bevel between a front surface and a top surface (Figs. 1-5, 8-10). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of LaCroix and Stuckey into that of Whissell and Batlle in order to provide easy cleavage planes and decorative beveled edges which would be pleasing to the eye. **As to Claim 8**, in the combined method, LaCroix teaches side gussets, and Stuckey also teaches side gussets, and in the combined method, Stuckey's "shoe" would provide an angular surface which compressed against the angular surface of the opposing side gussets. **As to Claims 9-20**, Batlle teaches a filler plug effect in the compressed mix (3:35-47). However, Whissell, Batlle, LaCroix, and Stuckey appear to be silent to the particular shapes and sizes sought in these dependent claims. However, these limitations appear to be drawn to the particular shape of the article sought and to the shape of the apparatus that makes the desired article. However, it is the

Examiner's position that when the process steps are known from the prior art, the limitations relating to *size* or *shape* of the *article* produced or the *apparatus* used to perform the process would not be sufficient to patentably distinguish the claimed method.

4. **Claims 9-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over Whissell (USPN 4802836) in view of Battle (USPN 5358214), and further in view of LaCroix (USPN 6113379) and Stuckey (USPN 1872522), and further in view of Knipper (USPN 3509250), Rasmussen (USPN 2475435), and Wittke (USPN 2532049). Whissell, Battle, LaCroix, and Stuckey teach the subject matter of Claim 8 above under 35 USC 103(a). **As to Claims 9-20**, Battle teaches a filler plug effect in the compressed mix (3:35-47). However, in the alternative that the size or shape of the article or bevels must be given patentable weight, Knipper, Rasmussen, and Wittke teach and suggest to the ordinary artisan that the sizes and shapes of the bevels and shoe be modified. In particular, Knipper teaches a plug (Fig. 3, Items 56, 66) in which inserts having a desired configuration can be put into the mold, and members of different configurations can be cast merely by changing the inserts without changing the basic structure of the mold (1:50-72). Knipper additionally teaches that the molding method and apparatus are readily adjustable to the size of the desired molded members (2:5-10). Rasmussen additionally teaches channels having a dovetail shape, or concave (Fig. 4, Items 33 and 32, respectively). Wittke teaches "shoes" having angled surfaces (Figs. 2 and 4, Item 41). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Knipper, Rasmussen, and Wittke into that of Whissell, Battle, LaCroix, and Stuckey in order to provide adjustable size and configuration bevels, as well as aesthetically pleasing and

structurally reinforcing channels, bevels, or recesses. In the combined method, it would have been prima facie obvious to vary the various configurations, sizes, or angles to arrive at the claimed invention.

5. **Claim 22** is rejected under 35 U.S.C. 103(a) as being unpatentable over Whissell (USPN 4802836) in view of Batlle (USPN 5358214), and further in view of Koyama (USPN 3662438). As to Claim 22, Whissell and Batlle appear to be silent to the simultaneous insertion. However, Batlle clearly suggests multiple elements, and Koyama inserts multiple elements to provide recesses simultaneously (Fig. 3 and elsewhere). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the method of Koyama into that of Whissell and Batlle in order to provide automated and rapid actuation at a high pressure.

6. **Claim 23** is rejected under 35 U.S.C. 103(a) as being unpatentable over Whissell (USPN 4802836) in view of Batlle (USPN 5358214), and further in view of Knipper (USPN 3509250), Rasmussen (USPN 2475435), and Wittke (USPN 2532049). Whissell and Batlle teach the subject matter of Claim 1 above under 35 USC 103(a). **As to Claim 23**, in the alternative that the size or shape of the article or bevels must be given patentable weight, Knipper, Rasmussen, and Wittke teach and suggest to the ordinary artisan that the sizes and shapes of the bevels and shoe be modified. In particular, Knipper teaches a plug (Fig. 3, Items 56, 66) in which inserts having a desired configuration can be put into the mold, and members of different configurations can be cast merely by changing the inserts without changing the basic structure of the mold (1:50-72). Knipper additionally teaches that the molding method and apparatus are readily

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adjustable to the size of the desired molded members (2:5-10). Rasmussen additionally teaches channels having a dovetail shape, or concave (Fig. 4, Items 33 and 32, respectively). Wittke teaches "shoes" having angled surfaces (Figs. 2 and 4, Item 41). It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Knipper, Rasmussen, and Wittke into that of Whissell, Battle, LaCroix, and Stuckey in order to provide adjustable size and configuration bevels, as well as aesthetically pleasing and structurally reinforcing channels, bevels, or recesses. In the combined method, it would have been prima facie obvious to vary the various configurations, sizes, or angles to arrive at the claimed invention.

7. **Claim 24** is rejected under 35 U.S.C. 103(a) as being unpatentable over Whissell (USPN 4802836) in view of Battle (USPN 5358214), LaCroix (USPN 6113379) and Stuckey (USPN 1872522). **As to Claim 24**, Whissell teaches the well known aspects of making masonry units, comprising:

- a) raising a pallet to a bottom surface of a mold (Figs. 5- 7)
- c) dispensing mix into the mold (Fig. 6)
- d) compressing the mix with a shoe (Figs. 6-7)
- e) responsive to the compressing, forming a plurality of masonry units.

Whissell appears to be silent to:

- a) a mold having gussets connected to internal surfaces of the mold
- b) inserting a plurality of filler plugs substantially simultaneously into the side of the mold between a partition plate and a pallet

c) the beveled edge surfaces

However, Batlle, LaCroix, and Stuckey teach the following aspects:

a) LaCroix teaches internal gussets (Fig. 7)

b) Batlle teaches inserting a filler plug into the side of the mold between a partition plate and a pallet (Figs. 1-5) to form beveled edges on the compressed mix corresponding to a masonry unit (3:35-47 and 2:46-49). Koyama teaches that it is known to do so substantially simultaneously (Fig. 3)

c) Stuckey teaches that by using beveled molds and a beveled shoe, it is possible to achieve a beveled-edge surface joining a front surface to a top surface, a bottom surface, and side surfaces. (Figs. 1-10)

It would have been prima facie obvious to one of ordinary skill in the art at the time of the invention to incorporate the methods of Batlle, LaCroix, Stuckey, and Koyama into that of Whissell for the following reasons:

a) Batlle teaches that stripping of the part from a mold causes serious problems since the adherence thereof to the mold itself and to the strips causes stresses to be formed in precastings, causing deterioration thereof, which Batlle's method resolves

b) the beveled edges of Stuckey and LaCroix would have been obviously desirable due their aesthetically pleasing appearance over sharp corners

c) Koyama's method would produce the obvious benefits of rapid and automated actuation.

Response to Arguments

8. Applicant's arguments filed 26 May 2006 have been fully considered but they are not persuasive. The arguments appear to be on the following grounds:

- a) The office action fails to enlist an "as a whole" analysis. This "as a whole" assessment of the invention requires a showing that the ordinary artisan, confronted by the same problems as the inventor, and with no knowledge of the claimed invention, would have selected the various elements from the prior art and combined them in the same manner. There is no showing of the same problems as the inventor, or the motivation to combine the elements of Claim 1.
- b) The combination in the rejection of Claim 7 fails to disclose or suggest "opposing side gussets". LaCoix's Fig. 7 would not be understood to be equivalent to gussets. Applicant's have attached a dictionary definition, which does not encompass Fig. 7 of LaCroix.
- c) Stuckey does not teach a shoe having an angular surface to create a bevel, and does not teach side gussets. Stuckey only teaches projections. A mold box is not a shoe.
- d) LaCroix teaches away from Stuckey because LaCroix incorporates a mechanism to provide a textured surface without the need for splitting, while Stuckey teaches the use of splitting techniques as an improvement.
- e) A motivation to combine Knipper, Rasmussen, and Wittke has not been properly established. Knipper is directed to window frames, Rasmussen is directed at undercut grooves and removal of the block.
- f) The Office makes several assertions of well known art or like-assertions. Applicant's assert that the subject matter should not be considered to be well known since the Office Action does not include specific factual findings predicated on sound technical and scientific reasoning to

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support the conclusions, as required. Because of this traversal, the Examiner must support his findings with evidence, or withdraw the well-known determination.

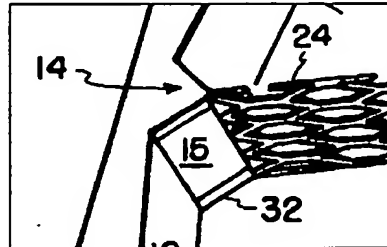
9. These arguments are not persuasive for the following reasons:

a) Battle clearly teaches that “Molds for such precastings are known in which there are fixed strips adapted to form in the concrete precasting slots or other types of void space. Nevertheless, in the regularly well known molds, stripping of the part from the mold causes serious problems, since the adherence thereof to the mold itself and to the said strips causes stresses to be formed in the precastings capable of causing a serious deterioration thereof.” (1:11-18) Battle continues “It is an objective of the invention to provide a mold in which the drawbacks mentioned in the forgoing paragraph are overcome, namely, one which does not cause the said stresses and involves a shorter time. This objective is obtained by a mold of the type described at the beginning which is characterized in that in said bottom there are to be found a plurality of grooves extending transversely between both sidewalls, there being in said sidewalls windows the passage of which is an extension of the groove.” (1:23-33)

Applicant's remarks appear to assert that the combination is a combination of unrelated elements drawn together merely to meet the claimed steps. However, the passages from Battle shown above clearly show comprehension of substantially the same problem addressed by Applicant and provide suggestion for the combination, namely to eliminate stresses (1:25-27).

b) Applicant has not argued what opposing side gussets *are*, but only that LaCroix's features are not side gussets. The Examiner respectfully disagrees. Applicant's definition includes “triangular insert in a seam”. LaCroix's Fig. 7, Item 14, clearly shows a triangular shape, and

Applicant has not explained why this cannot be deemed to be the claimed element. Applicant's definition appears to be consistent with the Examiner's interpretation.



Enlarged portion of Fig. 7 from LaCroix (USPN 6113379)

c) The Examiner asserts that inspection of the reference to Stuckey will show the claimed elements relied upon. Stuckey teaches an angular surface, which is both a projection and a bevel, on the shoe (the portion of the press which compresses the mixture) in Fig. 9, item 34. Stuckey provides an angled surface around the perimeter of the formed brick (Fig. 7), and the portion formed on the sides of the mold is still interpreted to be a side gusset. Stuckey teaches both a mold box and a shoe (the part which compacts the mixture) having the claimed elements.

d) The Examiner respectfully disagrees with the characterization of the references set forth in the Applicant's remarks. The Examiner asserts that there is no teaching away from the elements relied upon in the rejection merely because one reference teaches dividing the blocks, and one does not. Both references provide desirable shaping features, namely bevels of different configurations.

e) Applicant has not particularly argued the motivation provided, which is still believed to be valid. The particular configurations and shapes claimed have not been shown to materially affect

the method, and the cited references clearly provide teaching and motivation to change the shape or size.

f) Applicant's remarks appear to take exception to "well known" statements as unsupported by documentary evidence. The Examiner asserts that inspection of the "well known" statements, found in the rejections of Claims 1 and 24, shows that these statements are supported by documentary evidence from the reference to Whissell, shown by the citations which immediately follow the "well known" statements. No statements by the Examiner asserted to be "well known" have been particularly pointed out as being unsupported by citations to the reference, nor has the correspondence between the claimed elements and those of Whissell been challenged.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Daniels whose telephone number is (571) 272-2450. The examiner can normally be reached on Monday - Friday, 8:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on (571) 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJD 8/6/06



CHRISTINA JOHNSON
PRIMARY EXAMINER

8/6/06